

Abstract (Basic): WO 9419017 A

A composition is claimed which comprises: (a) a carrier, (b) a CD4-based protein, and (c) an antibody which specifically binds to an epitope present on an HIV-1 envelope glycoprotein and required for the fusion of a CD4-containing membrane with a membrane contg. the HIV-1 envelope glycoprotein, the ratio of CD4-based proteins to antibodies in the composition being such that the ratio of gp120 -binding sites on the CD-4 based proteins to epitope-binding sites on the antibodies is 0.01-100.

Also claimed is a method of decontaminating a fluid contg. HIV-1 comprising contracting the fluid with the composition described under conditions such that the composition forms a complex with the HIV-1 within the fluid which can then be removed, thus decontaminating the fluid.

USE - The composition may be used in a pharmaceutical preparation to reduce the likelihood of a subject becoming infected with HIV-1 or to reduce the rate of spread of HIV-1 infection in an HIV-1 infected subject (claimed).

In an example, several CD4-based molecules were tested including sCD4, CD4-gamma1 chimeric heavy chain homodimes, CD4-gamma 2 chimeric heavy chain homodimes and CD4-IgG2 chimeric hetero-tetramers. They were tested along or in combination with antibodies to gp120 or gp41. The antibodies included a mouse antibody (9205) to the V3 loop of gp120 from the HIV-1 HTLVIIIB isolate, and a human (2F5) to a conserved epitope of HIV-1 gp41. Results showed that the composition is more effective in blocking than either agent alone.

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